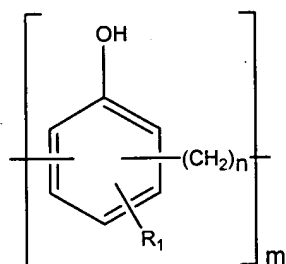


## AMENDMENTS TO THE CLAIMS:

### LISTING OF THE CLAIMS

1. (Currently Amended) A jet fuel composition comprising
- (i) a jet fuel; and
  - (ii) a phenolic additive consisting of a compound of Formula I



Formula I

wherein m is ~~at least~~ 1;

wherein n is 0 ~~or~~ 1;

~~wherein when m is 1, n is 0;~~

~~wherein the or each R<sub>1</sub> is a hydrocarbyl branched alkyl group with the proviso that the or each R<sub>1</sub> is free of carboxylic acid and carboxylic ester groups; and~~

~~wherein when m is 1, R<sub>1</sub> is a polymeric group comprising at least 12 carbon atoms and R<sub>1</sub> has a molecular weight of 500 to 2500.~~

2. (Original) A jet fuel composition according to claim 1 further comprising (iii) an antioxidant.

3. (Previously Presented) A jet fuel composition according to claim 1 further comprising (iv) a metal deactivator.

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Currently Amended) A jet fuel composition according to claim 1 wherein  $R_1$  is a  $C_{40}$ - $C_{200}$  group.

9. (Previously Presented) A jet fuel composition according to claim 1 wherein  $R_1$  is a  $C_{40}$ - $C_{180}$  group.

10. (Canceled)

11. (Currently Amended) A jet fuel composition of claim 1 wherein  $R_1$  is a polyalkenyl poly(branched alkenyl) group.

12. (Previously Presented) A jet fuel composition according to claim 1 wherein  $R_1$  is polyisobutene (PIB).

13. (Canceled)

14. (Canceled)

15. (Previously Presented) A jet fuel composition according to claim 1 wherein  $R_1$  has a molecular weight of approximately 750.

16. (Previously Presented) A jet fuel composition according to claim 1 wherein  $R_1$  has a molecular weight of approximately 1000.

17. (Previously Presented) A jet fuel composition according to claim 1 wherein  $R_1$  has a molecular weight of approximately 2300.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Previously Presented)      A jet fuel composition according to claim 2 wherein the antioxidant is a phosphonate.

32. (Original)      A jet fuel composition according to claim 31 wherein the antioxidant is dilauryl phosphonate.

33. (Previously Presented) A jet fuel composition according to claim 3 wherein the metal deactivator is N,N'-disalicylidene 1,2-propanediamine.

34. (Previously Presented) A jet fuel composition according to claim 1 wherein the compound of Formula I is present in an amount of 50-200mg/L.

35. (Previously Presented) A jet fuel composition according to claim 1 wherein the compound of Formula I is present in an amount of 80-120mg/L.

36. (Previously Presented) A jet fuel composition according to claim 2 wherein the antioxidant is present in an amount of 1-50mg/L.

37. (Original) A jet fuel composition according to claim 36 wherein the antioxidant is present in an amount of 1-30mg/L.

38. (Previously Presented) A jet fuel composition according to claim 3 wherein the metal deactivator is present in an amount of 0.05 – 10mg/L.

39. (Original) A jet fuel composition according to claim 38 wherein the metal deactivator is present in an amount of 0.5 – 5mg/L.

40. (Canceled)

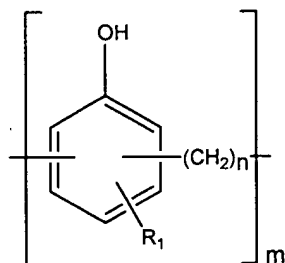
41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Currently Amended) A method for inhibiting deposit formation in a jet fuel at a temperature of from 100 to 335°C, the method comprising combining with the jet fuel a phenolic additive consisting of a compound of Formula I



Formula I

wherein m is ~~at least~~ 1;

wherein n is 0 ~~or~~ 1;

~~wherein when m is 1, n is 0;~~

~~wherein the or each R<sub>1</sub> is a hydrocarbyl branched alkyl group with the proviso that the or each R<sub>1</sub> is free of carboxylic acid and carboxylic ester groups; and~~

~~wherein when m is 1, R<sub>1</sub> is a polymeric group comprising at least 12 carbon atoms R<sub>1</sub> has a molecular weight of 500 to 2500.~~

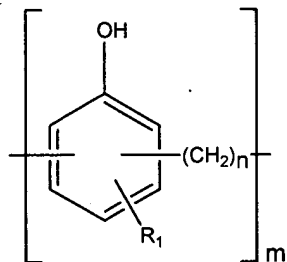
46. (Canceled)

47. (Canceled)

48. (Canceled)

49. (Canceled)

50. (New) Jet fuel oxidation inhibitor comprising  
a phenolic additive consisting of the compound of Formula I



Formula I

wherein m is 1;

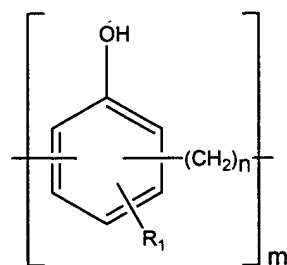
wherein n is 0;

wherein the or each R<sub>1</sub> is a branched alkyl group and R<sub>1</sub> has a molecular weight of 500 to 2500.

51. (New) The inhibitor of claim 50 further comprising an antioxidant.

52. (New) The inhibitor of claim 50 further comprising a metal deactivator.

53. (New) A method of inhibiting the oxidation of a jet fuel composition comprising  
adding to a jet fuel a phenolic additive consisting of the compound of Formula I



Formula I

wherein m is 1;

wherein n is 0;

wherein R<sub>1</sub> is a branched alkyl group and having a molecular weight of 500 to 2500  
to thereby forming a mixture.

54. (New) The method of claim 53 further comprising pre-combustion heating of the mixture.
55. (New) The method of claim 53 further comprising adding to one of the jet fuel or the mixture at least one from the group consisting of an antioxidant, a corrosion inhibitor, a lubricity improver, a metal deactivator, a leak detection additive, a special purpose additive, an anti-icing additive, and a static dissipater.
56. (New) The method of claim 53 wherein the branched alkyl group comprises a polymeric group comprising at least 12 carbon atoms.